

And further, if the Comb be here made use of, by whose Teeth the Colours at the Image PT may be successively intercepted; the Spectrum S when the Comb is moved slowly will be perpetually tinged with successive Colours: But when by accelerating the motion of the Comb, the succession of the Colours is so quick that they cannot be severally seen, that Spectrum S, by a confused and mixt sensation of them all, will appear white.

## EXPER. XII.

Fig. 9.

The Sun shining through a large Prism ABC upon a Comb XY, placed immediately behind the Prism, his Light which passed through the interstices of the Teeth fell upon a white Paper DE. The breadths of the Teeth were equal to their interstices, and seven Teeth together with their interstices took up an Inch in breadth. Now when the Paper was about two or three Inches distant from the Comb, the Light which passed through its several interstices painted so many ranges of Colours kl, mn, op, qr, &c. which were parallel to one another and contiguous, and without any mixture of white. And these ranges of Colours, if the Comb was moved continually up and down with a reciprocal motion, ascended and descended in the Paper, and when the motion of the Comb was so quick, that the Colours could not be distinguished from one another, the whole Paper by their confusion and mixture in the Sensorium appeared white.

Let

Let the Comb be moved further from the Paper, the Colours will be more and more, dilute one another of the Paper for a little more (so far dilute one

With any Object which passes through that the range of Colours be taken away, the ranges to be taken away, and accepted range painted upon the Colours them, will restore

Let the Paper be placed so that the rays, so that they copiously reflect off the Paper through changed into black much inclined to visible rays may be the rest, and by changed into yellow fore in that whiteness, by which come more copious and predominant appear.